Earthquake Shaking — Green Alert

GSN · USAID FROM THE AMERICAN PEOPLE · ANSS

M 6.5, 47 km NW of Barranca, Peru

Origin Time: 2022-02-03 15:58:57 UTC (Thu 10:58:57 local)
Location: 4.4879° S 76.9364° W Depth: 110.0 km

PAGER
Version 5

Created: 1 day, 0 hours after earthquake

Estimated Fatalities

Green alert for shaking-related fatalities and economic losses. There is a low likelihood of casualties and damage.

65% · 30% · 4%

1 · 10 · 100 · 1,000 · 10,000 · 100,000

Fatalities

Estimated Economic Losses

65% · 30% · 4%

1 · 10 · 100 · 1,000 · 10,000 · 100,000

USD (Millions)

Estimated Population Exposed to Earthquake Shaking

ESTIMATED POPULATION EXPOSURE (k=x1000)		–*	3,697k*	2,873k	49k	0	0	0	0	0
ESTIMATED MODIFIED MERCALLI INTENSITY		I	II-III	IV	V	VI	VII	VIII	IX	X+
PERCEIVED SHAKING		Not felt	Weak	Light	Moderate	Strong	Very Strong	Severe	Violent	Extreme
POTENTIAL DAMAGE	Resistant Structures	None	None	None	V. Light	Light	Moderate	Mod./Heavy	Heavy	V. Heavy
	Vulnerable Structures	None	None	None	Light	Moderate	Mod./Heavy	Heavy	V. Heavy	V. Heavy

*Estimated exposure only includes population within the map area.

Population Exposure

population per 1 sq. km from Landscan

0 · 5 · 50 · 100 · 500 · 1000 · 5000 · 10000
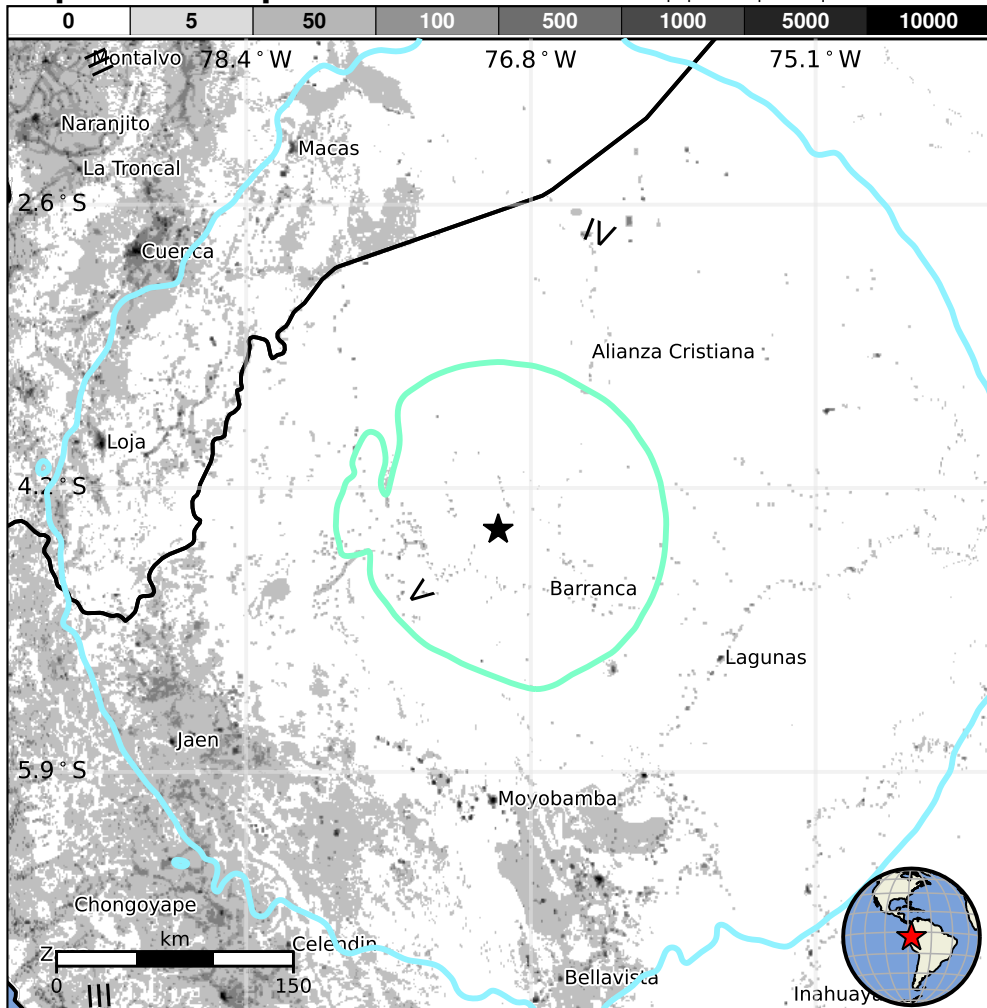
Structures

Overall, the population in this region resides in structures that are highly vulnerable to earthquake shaking, though some resistant structures exist. The predominant vulnerable building types are mud wall and reinforced/confined masonry construction.

Historical Earthquakes

Date (UTC)	Dist. (km)	Mag.	Max MMI(#)	Shaking Deaths
1990-06-09	180	5.5	VII(112k)	1
1995-10-03	213	7.0	VIII(5k)	2
1990-05-30	173	6.5	VIII(131k)	135

Selected City Exposure

from GeoNames.org

MMI	City	Population
V	Saramiriza	<1k
V	San Lorenzo	<1k
V	**Barranca**	**6k**
IV	Jeberos	<1k
IV	**Alianza Cristiana**	**<1k**
IV	**Lagunas**	**9k**
IV	**Loja**	**118k**
III	Cajamarca	135k
III	**Cuenca**	**277k**
III	Riobamba	124k
III	Babahoyo	76k

bold cities appear on map. (k = x1000)

PAGER content is automatically generated, and only considers losses due to structural damage.
Limitations of input data, shaking estimates, and loss models may add uncertainty.
https://earthquake.usgs.gov/earthquakes/eventpage/us7000ghm5#pager

Event ID: us7000ghm5